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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/458,248	12/09/1999	GEORGE NICHOLS	02103-365001	8624
26162	7590	11/17/2005	EXAMINER	
FISH & RICHARDSON PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			NI, SUHAN	
			ART UNIT	PAPER NUMBER
			2646	

DATE MAILED: 11/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/458,248

Applicant(s)

NICHOLS ET AL.

Examiner

Suhan Ni

Art Unit

2646

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.



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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Paper No. 51111

Application Number: 09/458,248
Filing Date: 12/09/1999
Appellant(s): George Nichols et al.

Charles Hieken
For Appellant

EXAMINER'S ANSWER

MAILED

NOV 17 2005

Technology Center 2600

MAILED

NOV 22 2005

Technology Center 2600

This is in response to the appeal brief filed 09/02/2004.

(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

The examiner is not aware of any related appeals, interferences, or judicial proceedings, which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

(4) *Status of Amendments After Final*

No amendment after final has been filed.

(5) *Summary of Claimed Subject Matter*

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The summary of invention contained in the brief is correct.

(6) *Grounds of Rejection to be reviewed on Appeal*

The appellant's statement of the issues in the brief is correct.

The following grounds of rejection have not been withdrawn by the examiner, but they are not under review on appeal because they have not been presented for review in the appellant's brief.

(7) *Claims Appendix*

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) *Evidence Relied Upon*

1,930,577	Atkinson	10-17-1933
3,393,766	Mitchell	07-23-1968
4,509,184	Yanagawa	04-02-1985
6,021,208	Kin-Lung	02-01-2000
6,179,359	Clauson et al.	01-30-2001

Doug Newcomb. "Car Stereo, October 1999, page 20-25"

(9) *Grounds of Rejection*

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(a) The invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(i) Claims 1-3, 5-6, 8, 10-14, 16-17 and 20-24 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by Doug Newcomb (Car Stereo, Oct. 1999).

Regarding **claim 1**, Newcomb discloses an acoustic assembly (page 23), comprising: an electro-acoustical transducer (tweeter); and an acoustic element (waveguide or grille), separate from said transducer, and structured to improve the acoustic performance of said transducer; and said acoustic assembly designed and constructed to be an element of a vehicle pillar (A-pillar) as claimed.

Regarding claims 2-3, Newcomb further discloses the acoustic assembly, wherein the acoustic element is a two-ended waveguide (page 23).

Regarding claims 5-6, Newcomb further discloses the acoustic assembly, wherein the acoustic assembly has a ported acoustic volume (page 23).

Regarding claim 8, Newcomb further discloses the acoustic assembly, wherein the acoustic assembly has a sealed acoustic volume (page 23).

Regarding claim 10, Newcomb further discloses the acoustic assembly, wherein the vehicle pillar is an A-pillar (page 23).

Regarding **claim 11**, Newcomb discloses a structural automobile pillar containing an acoustic assembly (page 23), said acoustic assembly comprising: an electro-acoustical driver (tweeter); and an acoustic element (waveguide or grille) as claimed.

Regarding claim 12, Newcomb further discloses the automobile pillar, wherein the vehicle pillar is an A-pillar (page 23).

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Regarding claims 13-14, Newcomb further discloses the automobile pillar, wherein the acoustic element is a two-ended waveguide (page 23).

Regarding claims 16-17, Newcomb further discloses the automobile pillar, wherein the acoustic assembly has a ported acoustic volume (page 23).

Regarding claim 20, Newcomb discloses an acoustic assembly (page 23), comprising: an electroacoustical transducer (Figs.); and an acoustic element (wave guide or grille), separate from said transducer, and structured to improve the acoustic performance of said electroacoustical transducer as claimed.

Regarding **claim 21**, Newcomb discloses a trim element for covering a vehicle pillar, said trim element forming an acoustic assembly (page 23).

Regarding claim 22, Newcomb further discloses the trim element, wherein the acoustic element is a two-ended waveguide (page 23).

Regarding claim 23, Newcomb further discloses the trim element, wherein the acoustic assembly is an acoustic volume (page 23).

Regarding claim 24, Newcomb further discloses the trim element, wherein the vehicle pillar is an A-pillar (page 23).

(ii) Claims 25, 27 and 29 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Atkinson (U.S. Pat. -1,930,577).

Regarding **claim 25**, Atkinson discloses an automobile pillar (Fig. 1) comprising a plurality of sound sources (11, 15, 20).

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Regarding claim 27, Atkinson further discloses the automobile pillar, wherein a first of the sound sources comprises a first electroacoustic transducer (11) and a second of the sound sources comprises a port opening (15, 20) as claimed.

Regarding claim 29, Atkinson further discloses the automobile pillar, wherein said plurality of sound sources comprises an electroacoustic transducer (11) and a waveguide opening (15, 20) as claimed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

(i) Claims 4, 7, 9, 15 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doug Newcomb (Car Stereo, Oct. 1999).

Regarding claim 4, Newcomb does not clearly show that the acoustic element is a single-ended waveguide as claimed. Since providing a single-ended waveguide for an acoustic transducer is well known in the art, it therefore would have been obvious to one skilled in the art at the time the invention was made to provide the single-ended waveguide for the acoustic assembly, in order to provide an acoustic assembly having more directional sound features.

Regarding claims 7 and 9, Newcomb does not clearly show a second electroacoustical transducer as claimed. Since providing more than one speaker for an acoustic assembly is well known in the art, it therefore would have been obvious to one skilled in the art at the time the

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invention was made to provide a desirable number of speakers, such as two for the acoustic assembly, in order to provide a multi-channel surrounding sound for users.

Regarding claim 15, Newcomb does not clearly show that the acoustic element is a single-ended waveguide as claimed. Since providing a single-ended waveguide for an acoustic transducer is well known in the art, it therefore would have been obvious to one skilled in the art at the time the invention was made to provide the single-ended waveguide for the acoustic assembly, in order to provide an acoustic assembly having more directional sound features.

Regarding claim 18, Newcomb discloses a structural automobile pillar containing an acoustic assembly (page 23), said acoustic assembly comprising: an electro-acoustical driver; and an acoustic element, wherein the pillar is an A-pillar (page 23), and the acoustic assembly is a ported acoustic volume (page 23). But Newcomb does not clearly show a second electroacoustical transducer as claimed. Since providing more than one speaker for an acoustic assembly is well known in the art, it therefore would have been obvious to one skilled in the art at the time the invention was made to provide a desirable number of speakers, such as two for the acoustic assembly, in order to provide a multi-channel surrounding sound for users.

Regarding claim 19, Newcomb further discloses the acoustic assembly, wherein the acoustic assembly has a sealed acoustic volume (page 23).

(ii) Claim 26 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atkinson (U. S. Pat. - 1,930,577).

Regarding claims 26 and 28, Atkinson does not clearly show a second electroacoustical transducer as claimed. Since providing more than one speaker for an acoustic assembly is well known in the art, it therefore would have been obvious to one skilled in the art at the time the

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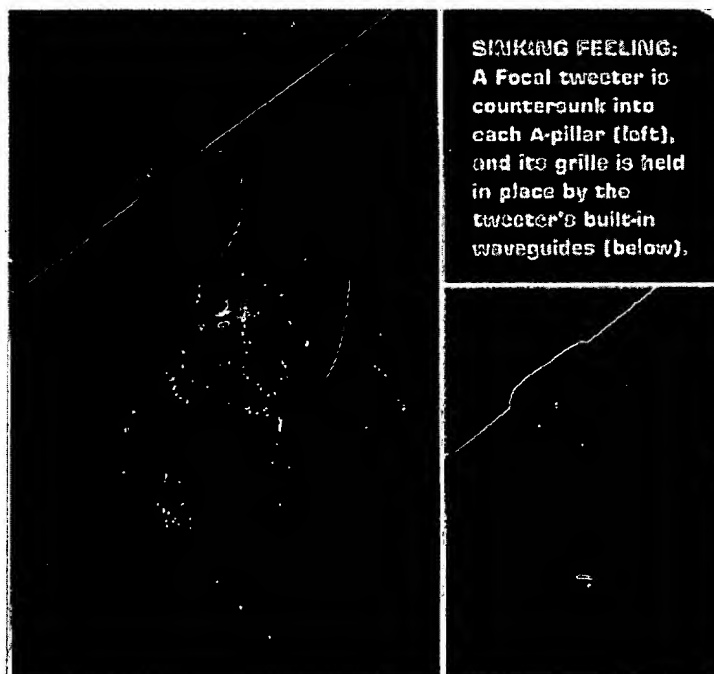
invention was made to provide a desirable number of speakers, such as two for the acoustic assembly, in order to provide an acoustic assembly with desirable frequency coverage range.

(10) Response to Argument

Applicant's arguments dated 01/12/2004 have been fully considered, but they are not deemed to be persuasive.

The cited reference (Doug Newcomb, Car Stereo, Oct. 1999) does clearly show all the limitation as claimed. For example:

Regarding claim 1, Newcomb discloses an acoustic assembly (Figure below from page 23), comprising: an electro-acoustical transducer (tweeter); and an acoustic element (waveguide or grille), separate from said transducer, and structured to improve the acoustic performance (sending acoustic output to different direction or making the assembly more durable) of said transducer; and said acoustic assembly designed and constructed to be an element of a vehicle pillar (A-pillar) as claimed.



The applicant argues: “there is no disclosure of the waveguide being an acoustic element separate from the electroacoustical transducer” and the examiner respectfully disagrees with the applicant. An average skilled person in the art will clearly understand that a waveguide or grille is structured and capable of improve the acoustic performance, such as propagating acoustic output into desirable direction, and/or filtering the acoustic output, so that they both can be considered as an acoustic element. Furthermore, the disclosed tweeter is a commonly commercially available high-frequency speaker (T3X tweeter, col. 3, line8 of page 23) and “**a third ABS piece, the frame for the grill**, sits on top of the trim ring and is held in place by each tweeter’s build-in waveguides” (col. 3, lines 16-21 of page 23). Therefore, it clearly indicates that the acoustic element, the grille is separate from the transducer (tweeter) as claimed in the application.

Regarding claim 25, Atkinson discloses an automobile pillar (Fig. 1, pillar - upright support for a superstructure) comprising a plurality of sound sources (11, 15, 20). The venting holes (15, 20) are balancing acoustic pressure and emitting sound (as **sound sources**) as well.

Regarding claim 11, Newcomb discloses a structural automobile pillar containing an acoustic assembly (page 23), said acoustic assembly comprising: an electro-acoustical driver (tweeter); and an acoustic element (waveguide or grille) as claimed.

Regarding claims 4, 7, 9 15, 18-19, 26 and 28, the applicants argue no secondary references to teach the missing limitation, which has been taught by an official notice by the examiner. The examiner newly cited several US patents for the support of the official notices. All newly cited references teach plurality types of waveguides and Yanagawa (U. S. Pat. - 4,509,184) further teaches a second transducer as claimed. Furthermore, the applicants argue no

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motivation to combine the references. The motivation has been clearly included in the rejection and it is not necessary that the references actually suggest, expressly or in so many words the changes or improvements that applicants have made. The test for combining references is what the references as whole would have suggested to one of ordinary skilled in the art. **In re Sheckler, 168 USPQ 716 (CCPA 1971); In re Mlaughlin 170 USPQ 209 (CCPA 1971); In re Young 159 USPQ 715 (CCPA 1968).**

(11) Examiner's Answer, Conclusion

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



SINH TRAN
SUPERVISORY PATENT EXAMINER



SUHAN NI
PRIMARY EXAMINER

Suhan Ni
TC 2600



CURTIS KUNTZ
SUPERVISORY PATENT EXAMINER
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November 12, 2005